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For: BIOLOGICAL SAMPLE PROCESSING METHODS AND COMPOSITIONS THAT INCLUDE SURFACTANTS

a plurality of process chambers in the device, each of the process chambers defining a volume for containing a sample mixture;

a plurality of valves with at least one of the valves located between selected pairs of the process chambers; and

wherein the sample mixture comprises an enzyme, a dye, and an effective amount of a surfactant selected from the group of a nonionic surfactant, a zwitterionic surfactant, and a mixture thereof, wherein the dye inactivates the enzyme in the absence of the surfactant, and the surfactant inhibits such interaction.

49. **(Amended)** A method of conducting a thermal cycling process comprising:
providing a device comprising a plurality of process chambers, each of the process chambers defining a volume for containing a sample mixture;

providing a sample mixture in at least some of the process chambers;

delivering electromagnetic energy to the process chambers to raise the temperature of the sample mixture in the process chambers;

rotating the device about an axis of rotation while delivering the electromagnetic energy, wherein the temperature of the sample mixture in the process chambers is controlled as the substrate rotates; and

wherein the sample mixture comprises an enzyme, a dye, and an effective amount of a surfactant selected from the group of a nonionic surfactant, a zwitterionic surfactant, and a mixture thereof, wherein the dye inactivates the enzyme in the absence of the surfactant, and the surfactant inhibits such interaction.

50. **(Amended)** A method of processing sample material comprising:
providing a device comprising a plurality of process chamber arrays, each of the process chamber arrays comprising a loading chamber, a first process chamber, and a second

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process chamber;

providing a sample mixture in the loading chamber of at least one of the process chamber arrays;

moving the sample mixture from the loading chamber into the first process chamber by rotating the device;

controlling the temperature of the sample mixture in the first process chamber by rotating the device about an axis of rotation while delivering electromagnetic energy to the first process chamber;

moving the sample mixture from the first process chamber to the second process chamber by rotating the device;

controlling the temperature of the sample mixture in the second process chamber by rotating the device about an axis of rotation while delivering electromagnetic energy to the second process chamber; and

wherein the sample mixture comprises an enzyme, a dye, and an effective amount of a surfactant selected from the group of a nonionic surfactant, a zwitterionic surfactant, and a mixture thereof, wherein the dye inactivates the enzyme in the absence of the surfactant, and the surfactant inhibits such interaction.